IN THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A device for clamping and releasing a work tool (16) in a work tool receptacle, the work tool having a work tool shaft (14), the device including:

the work tool receptacle (10) including a socket part (12) open on its free end (24) and comprising electrically conductive material adapted for frictionally engaging reception of the tool shaft (14), and

an induction coil (26) in the form of a ring or cylindrical coil having a first end adjacent the free end of the socket part, a second end opposite the free end of the socket part, and an outer surface, said induction coil encircling the socket part (12) of the tool receptacle (10) and adapted for heating the socket part (12) when energized with high frequency alternating current,

wherein the first end of the induction coil (26) adjacent the free end of the socket part (12) is closed off by a pole shoe (34) exhibiting a central through-hole (36) for the tool (16) and comprised of a magnetically conductive and electrically non-conductive material, and

wherein the pole shoe (34) partially overlaps the free end (~~ring surface~~ 24) of the socket part (12).

2. (Previously presented) A device according to Claim 1, wherein the pole shoe (34) lies axially and/or radially against the free end of the socket part (12).

3. (Previously presented) A device for clamping and releasing a work tool (16) in a work tool receptacle, the work tool having a work tool shaft (14), the device including:

the work tool receptacle (10) including a socket part (12) open on its free end (24) and comprising electrically conductive material adapted for frictionally engaging reception of the tool shaft (14), and

an induction coil (26) in the form of a ring or cylindrical coil having a first end adjacent the free end of the socket part, a second end opposite the free end of the socket part, and an outer surface, said induction coil encircling the socket part (12) of the tool receptacle (10) and adapted for heating the socket part (12) when energized with high frequency alternating current,

wherein the first end of the induction coil (26) adjacent the free end of the socket part (12) is closed off by a pole shoe (34) exhibiting a central through-hole (36) for the tool (16) and comprised of a magnetically conductive and electrically non-conductive material, and

wherein the pole shoe (34) lies axially and/or radially against the free end of the socket part (12).

4. (Previously presented) A device according to Claim 3, wherein the through-hole (36) of the pole shoe (34) is larger in dimension than the tool shaft diameter.

5. (Previously presented) A device according to Claim 3, wherein the pole shoe exhibits a cross section which tapers partially in the direction of the through hole (36).

6. (Previously presented) A device according to Claim 3, wherein the pole shoe (34) is a ring disc.

7. (Previously presented) A device according to Claim 6, wherein the ring disc includes a conical recess which is concentric with the through hole (36).

8. (Previously presented) A device for clamping and releasing a work tool (16) in a work tool receptacle, the work tool having a work tool shaft (14), the device including:

the work tool receptacle (10) including a socket part (12) open on its free end (24) and comprising electrically conductive material adapted for frictionally engaging reception of the tool shaft (14), and

an induction coil (26) in the form of a ring or cylindrical coil having a first end adjacent the free end of the socket part, a second end opposite the free end of the socket part, and an outer surface, said induction coil encircling the socket part (12) of the tool receptacle (10) and adapted for heating the socket part (12) when energized with high frequency alternating current,

wherein the first end of the induction coil (26) adjacent the free end of the socket part (12) is closed off by a pole shoe (34) exhibiting a central through-hole (36) for the tool

(16) and comprised of a magnetically conductive and electrically non-conductive material,

wherein the pole shoe (34) is a ring disc, and

wherein the ring disc exhibits a cross section which tapers partially in the direction of the through hole (36).

9. (Previously presented) A device according to Claim 8, wherein the pole shoe (34) is formed of multiple radial segments arranged as spokes.

10. (Previously presented) A device for clamping and releasing a work tool (16) in a work tool receptacle, the work tool having a work tool shaft (14), the device including:

the work tool receptacle (10) including a socket part (12) open on its free end (24) and comprising electrically conductive material adapted for frictionally engaging reception of the tool shaft (14), and

an induction coil (26) in the form of a ring or cylindrical coil having a first end adjacent the free end of the socket part, a second end opposite the free end of the socket part, and an outer surface, said induction coil encircling the socket part (12) of the tool receptacle (10) and adapted for heating the socket part (12) when energized with high frequency alternating current,

wherein the first end of the induction coil (26) adjacent the free end of the socket part (12) is closed off by a pole shoe (34) exhibiting a central through-hole (36) for the tool (16) and comprised of a magnetically conductive and electrically non-conductive material, and

wherein the pole shoe (34) is formed of multiple radial segments arranged as spokes.

11. (Previously presented) A device according to Claim 10, wherein the induction coil (26) on its side opposite the pole shoe and/or on its outer surface is provided with a magnetic shield (42, 44) of a magnetically conductive and electrically non-conductive material.

12. (Previously presented) A device according to Claim 11, wherein said magnetic shield (42) at the side opposite the pole shoe is formed as a ring disk with a through hole (46) for insertion of the socket part (12) of the tool receptacle (10).

13. (Previously presented) A device according to Claim 11, wherein said magnetic shield (42) provided at the side opposite the pole shoe is formed of multiple radial segments arranged like spokes.

14. (Previously presented) A device according to Claim 11, wherein the shield (44) at the outer surface of the induction coil is in the form of a cylindrical cage.

15. (Previously presented) A device according to Claim 14, wherein the cylindrical cage is closed in the circumferential direction.

16. (Previously presented) A device according to Claim 14, wherein the cylindrical cage is comprised of multiple, axially

parallel segments arranged spaced apart from each other in the circumference direction.

17. (Previously presented) A device according to Claim 1, wherein the pole shoe is comprised of a soft magnetic material.

18. (Previously presented) A device according to Claim 1, wherein the pole shoe is comprised of a soft ferritic ceramic oxide material.

19. (Previously presented) A device according to Claim 11, wherein the magnetic shield (42, 44) on the side of the coil opposite the pole shoe and at the coil outer surface is comprised of a soft magnetic material.

20. (Previously presented) A device according to Claim 1, wherein the pole shoe (34) exhibits a ring shaped centering shoulder or step concentric to the through hole (36) for receiving the free end of the socket part (12) and/or for supporting on the ring opening of the induction coil (26).

21. (Previously presented) A device according to Claim 1, wherein the induction coil (26) is comprised of coil windings (33) of a high frequency stranded wire.

22. (Previously presented) A device according to Claim 21, wherein the coil winding (33) is air cooled.

23. (Previously presented) A device according to Claim 1, wherein the induction coil (26) is in the form of a bobbin or coil body (32) and comprised of a ceramic material.

24. (Previously presented) A device according to Claim 1, wherein the socket part (12) includes a close-fitting borehole for receiving the tool shaft (14), which towards the free end communicates with a segment of larger diameter.

25. (Previously presented) A device according to Claim 1, wherein the socket part (12) includes a cylindrical or truncated conical outer surface (22).

26. (Previously presented) A device according to Claim 1, wherein the tool receptacle (10) includes a coupling piece (18) carrying the socket part (12) and connectable with a rotatable machine spindle.

27. (Previously presented) A device according to Claim 1, wherein the tool receptacle (10) and the induction coil (26) are moveable relative to each other.

28. (Previously presented) A device according to Claim 1, wherein the pole shoe (34) in the operating condition borders towards the tool shaft, a ring-shaped air gap.

29. (Previously presented) A device according to Claim 19, wherein the magnetic shield (42, 44) on the side of the coil opposite the pole shoe and at the coil outer surface is comprised of a soft ferritic ceramic oxide material.